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PATENT APPEAL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS AND INTERFERENCES

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Appeal Number

In re Application of : Roger MASSEY  
Serial no. : 09/585,222  
Filed : June 1, 2000  
For : BAR-STOCK BALL VALVE  
Group Art Unit : 3754  
Examiner : D. Austin Bonderer  
Docket : GEMVAL P15AUS

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APPELLANT'S BRIEF

10/04/2004 EFLORES 00000011 09585222

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The Hon Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

This Appeal Brief is being filed in support of Appellant's Notice of Appeal mailed on July 29, 2004 because of the final rejection of claims 1-3 and 5-8 issued by the Primary Examiner.

1. REAL PARTY IN INTEREST: The real party in interest is: Parker and Harper Companies, Inc.

2. RELATED APPEALS AND INTERFERENCES: This is a second Appeal of the present application. A first Appeal was filed April 30, 2002 upon which the Board reversed the Examiner's rejections of the then pending claims under 35 U.S.C. §§ 102 and 103. There are no other related appeals or interferences in respect of the instant or any related patent application.

3. STATUS OF CLAIMS: Presently claims 1-3 and 5-8 are pending and presented for appeal, and the remaining claim 4 has been canceled. Claims 1-3 and 5-8 stand rejected by the Examiner and are set forth in the Appendix A attached hereto.

4. STATUS OF AMENDMENTS: The Appellant filed a Response on May 19, 2004 including amendments to claims 1, 6, 7 and 8 and submitting arguments pertaining to the anticipation and obviousness rejections of the pending claims, mailed under a May 19, 2004 Certificate of Mailing date. These amendments were entered by not deemed to place the case in condition for allowance by the Examiner.

An After Final Response was filed by the Appellant on July 29, 2004 including further amendments which have not been entered in view of the Examiner's advisory opinion relating that the amendments raise new issues that would require further consideration and/or search. Therefore, the pending claims 1-3 and 5-8 presented for appeal are those including the amendments from the Appellant's response of May 19, 2004.

5. SUMMARY OF INVENTION:

The present invention relates to improvements in barstock valve technology, specifically to a unique barstock housing and method of manufacture which reduces the size and cost of the size of barstock required for a given application. The size and cost reduction is accomplished through eccentric (or off-center) machining of the barstock to create a flow passage through the bar stock housing. The eccentrically located flow passage results in a thinner wall portion and a thicker wall portion adjacent to the flow passage, and an initially smaller barstock size while allowing for a standard stem port or bottom flow port to be accommodated, generally in the thicker wall portion.

6. ISSUES: The issues presented for appeal are as follows:

(a) Whether claims 1, 2, 5 and 7 are anticipated by U.S. Patent No. 3,675,895 to Matousek for TRUNION MOUNTING FOR ENCAPSULATED BALL VALVE, hereinafter referred to as Matousek '895.

(b) Whether claim 6 is anticipated by or in the alternative obvious under 35 U.S.C. § 103(a) over Matousek '895, whether the method of making the Applicant's valve is inherent or obvious in view of Matousek '895 machine valve.

(c) Whether claims 3 and 8 are unpatentable under 35 U.S.C. § 103(a) over Matousek '895 in view of Dicky '055 and whether it would be obvious to one of ordinary skill in the art to provide Matousek '895 with the flow pattern as taught by Dicky '055 and also that it would be obvious to build the valve in the claimed manner.

7. GROUPING OF CLAIMS: Claims 1, 6, 7 and 8 are written in independent form. The remaining claims 2, 3 and 5 are written in dependent form and depend either directly or indirectly from independent claim 1. All of the pending claims are apparatus claims except claim 6 which is a method claim.

Group I: Claims 1, 2, 3, 5 and 7 are believed patentable under grounds for rejection (a). Claims 1, 2, 3 and 5 of Group I stand or fall with the allowability of claim 1. Claim 7 does not stand or fall with the allowability of claim 1.

Group II: Independent claim 6 is believed patentable under grounds for rejection (b).

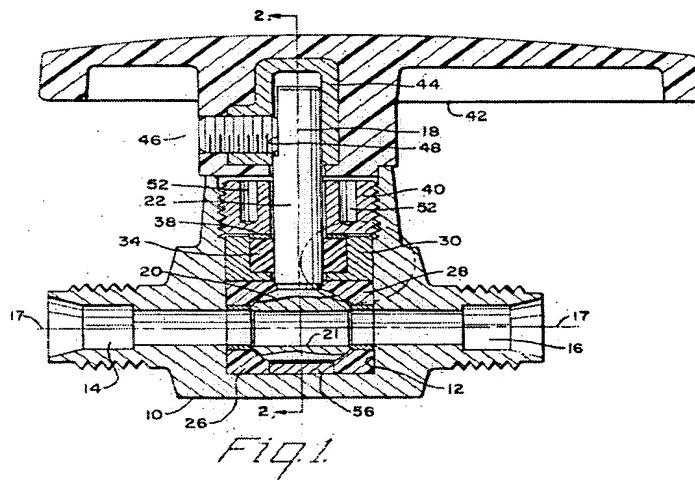
Group III: Claim 8 is believed patentable under grounds for rejection (c).

8. ARGUMENTS - Rejections Under 35 U.S.C. § 102:

It is the Appellant's belief that the anticipation rejection of claims 1, 2, 3, 5 and 7 under 35 U.S.C. § 102 in view of Matousek '895 is in error for the following reasons.

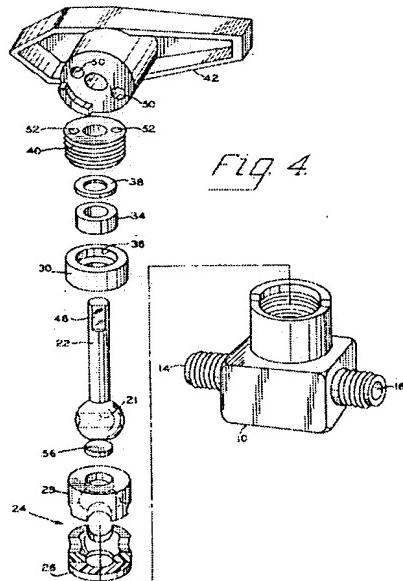
- (a) Although Matousek '895 discloses a ball valve, the Appellant's claimed invention is considerably different and overcomes the drawbacks associated with such conventional ball valve housings such as disclosed by the reference.

By way of explanation, Matousek '895 discloses a ball valve assembly for fluid control, particularly in instruments and instrumentation systems. Observing Fig. 1 of Matousek '895 below, the ball valve includes a conventional valve housing 10 and ball 20 as are well known in the art. The housing 10 encases a ball packing arrangement 24 of a synthetic, resilient resinous material encapsulating the ball 20 under a compressive preload. This arrangement is alleged to prevent leakage of fluid between the ball 20 and housing 10.



24 and receives the separate ball 20 and ball stem 22 of the valve. It is important to note that as shown by the Appellant's added reference letters a, b and h in the above figure, a valve chamber portion b, of the valve chamber 12 extends like a chimney to a height h well above a main body portion a, of the housing 10 to accommodate the preloaded gland 30, bushing 34 and nut 40 of the packing arrangement 24.

Matousek '895 describes the valve housing 10 may be "...machined from a single piece of stock, such as brass. This type of housing is generally referred to as a "bar stock" housing." Col. 2, lines 57-59. Observing Appellant's Fig. 4 of Matousek '895 as shown immediately below, it is also important to note that this valve including ports 14 and 16, and in particular the chimney like valve chamber portion b of the valve chamber 12 which extends above the valve body portion a, requires rather intensive machining. The Applicant asserts that it would be easier and cheaper to produce such a valve by casting, but giving deference to the reference and the Examiner, it would be possible although unlikely, that an oversize piece of "bar stock" could be selected to accommodate the entire height h.



Matousek '895 Fig.4

It is to be appreciated that fabrication of the valve body 10 from barstock is a highly inefficient and costly machining process of the type which the present invention is expressly

intended to forego. As discussed in the Appellant's specification at page 26, lines 26-31, the Appellant's invention describes and claims a housing structure which eliminates such machining inefficiencies and costs, thus allowing for use of a preselected smaller, and therefore cheaper, barstock size.

Different from Matousek '895, the present invention describes and claims a unique valve housing structure, and method of making the valve housing from smaller preselected barstock which does not require machining of the walls. The claimed structure of the Applicant's valve housing is not only significantly different from the applied reference, but also the novel structure allows a highly efficient and economical manufacture of the valve housing from barstock with minimal machining.

For example, observing Appellant's Fig. 1 below, in the case of a two-way valve the Appellant's eccentrically located throughbore along axis 12 allows the standard size valve stem to be used in the resulting thicker barstock wall portion where necessary and a thinner barstock wall thickness on the valve body opposite the valve stem thus reducing the overall size of the barstock necessary to form the valve body.

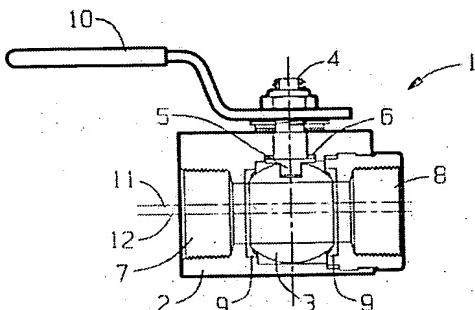
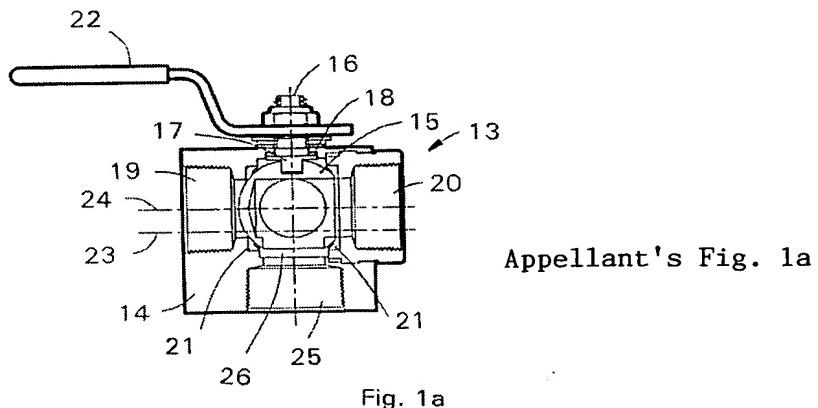


Fig. 1  
Appellant's Fig. 1

As another example, observing Appellant's Fig. 1a below, the stem may also be placed in the thinner portion of the valve body wall, so that the thicker portion of the barstock wall can accommodate a third flow port connection, again resulting in a smaller initial size of barstock necessary to form the valve.



Both embodiments thus preselect barstock body valves having a size and weight which do not have to have to be changed or machined due to the eccentric (or off-center) machining of the flow passage or throughbore through the valve body.

- (b) Matousek '895 does not anticipate claims 1, 2, 5 and 7 under 35 U.S.C. 102(b) because the cited reference does not disclose each and every feature of the present invention as required by case law

The Examiner's anticipation argument at section 2., page 2 of the Final Official Action, states:

*Claims 1, 2, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Matousek. Matousek discloses a barstock valve comprising:*

- *An inlet and an outlet;*
- *A substantially uniform cross section;*
- *A main flow port;*
- *Increased thickness on one side (the top);*
- *All openings machined from barstock;*
- *A stem port that is perpendicular; and*
- *A quarter turn ball valve*

While the Appellant's independent claims 1 and 7 recite an inlet and an outlet as arguably shown by the applied reference, the Appellant takes issue with the Examiner's assertion that Matousek '895 discloses "...a substantially uniform cross section..." as recited in Appellant's independent claims. The Examiner states at section 6. of the Final Action that "Matousek discloses a valve made of Barstock with substantially uniform cross-section.

Curiously , this argument is predicated on what Matousek '895 does not disclose, not on any actual subject matter disclosed by the reference. A thorough study of Matousek '895 fails to reveal any disclosure, teaching or even a suggestion that the Matousek '895 barstock, either as originally selected for machining or as embodied in the finished product, has a substantially uniform cross-section as shown in each of the Appellant's Figs. 1-6, and recited in claims 1 and 7.

Furthermore, There is no indication that the barstock from which the valve is made had variations in it." Importantly, the Examiner has ignored the remaining express structural limitations of the claim language, namely "..a substantially uniform transverse crosssection defining the outer walls;.." This is adamantly not disclosed, taught or suggested in any manner by the applied reference.

In any event, even assuming that Matousek '895 begins the fabrication process with barstock having a "substantially uniform cross-section", what is obtained after machining, as observed particularly in Matousek '895 Fig. 4, is not "a barstock body of preselected material having an inlet end and an outlet end, and a substantially uniform transverse cross-section defining the outer walls;..." as specifically recited by the Appellant in claim 1. This language was specifically added to further structurally differentiate the Appellant's claimed invention which does not need to machine the sidewalls of the valve, from housings like that in Matousek '895 which have a substantial variation in cross-section due to the necessity to over machine the larger barstock used to make the valve.

As another matter, the Matousek '895 barstock is not "preselected" claimed and as defined in the Appellant's specification so that the valve body walls require no significant

machining to receive a standard length ball stem. The Appellant's specification states at page 2, lines 7-9. that " machining the primary passage of the valve eccentrically (off-center line) permitting use of initially smaller and lighter barstock material." Also on page 2 line 17 and 18, "[a]ccording to the invention there is provided barstock of preselected size and material." Thus, the Appellant's "preselection" of a smaller and lighter barstock which does not have to be machined to the extent as in Matousek '895 is specifically enabled by the eccentric formation of the flow passage.

What Matousek '895 actually discloses, is a highly machined valve housing having a substantial variation in cross-section of the valve housing 12 as well as the outer wall defined thereby, not "...a substantially uniform cross section defining the outer walls;..." as claimed by the Appellant. Observing the cross-section of valve housing 10 shown in Figs. 1 and 2 of Matousek '895, the walls of the valve housing 10 are certainly not substantially uniform.

At either ends of the housing 10 the extending male inlet and outlet ports 14 and 16 are machined significantly smaller, i.e. defining a cross section and outer wall approximately half the diameter of that of the main body portion a of the housing 10. Furthermore, the chimney-like extension of the valve chamber 12 extends well above the main body of the housing 10 again presenting a significantly different cross-section than either the inlet/outlet or the main body portion b.

These are not minor, nor insignificant parts of Matousek's valve housing 10. The inlet 14 and outlet 16 are integral and lengthy portions of the housing 10. Likewise, the chimney-like valve chamber 12 extends almost the entire length and width of the main body portion a and is an integral portions of the valve wall. Together these features delineate a significant variation in the transverse cross-section of the valve and outer walls as seen in Figs. 1 and 2.

Thus, any increased thickness on one side (the top side) as the Examiner argues, this increased thickness is due to a step-wise, laterally varying transverse cross section of the valve housing wall along its length which comes at the expense of "...a uniform cross section defining the outer walls;" as presently recited in claim 1, and "a barstock body having outer walls

extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-section circumscribed about a central longitudinal axis;..." as recited in claim 7.

The Examiner has also failed to adequately consider the relevant claim language with respect to another critical feature of the present invention, that is specifically the claimed feature of "...a through machined main flow port located eccentrically on said inlet and said outlet ends;" as recited in claim 1, and the features of "a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal throughbore axis parallel spaced from the central longitudinal axis, the through bore is eccentrically located with respect to the outer walls producing a thicker outer wall portion and a relatively thinner opposite wall portion of the barstock body; ..." as recited in claim 7.

As best the Appellant understands the Examiner's general argument relative to this feature of the Appellant's claimed invention, as apparently set forth in section 6., on page 3 of the Final Official Action of July 9 2004, the Examiner asserts that relative to an entire piece of bar stock forming the Matousek '895 valve housing 10, including the main body portion a and the valve chamber portion b, the fluid passage along axis 17 is offset relative to some undefined centerline of the entire barstock housing 10. Whether this is true or not, and the Appellant can find no disclosure in Matousek '895 to support the Examiner's contention, the Appellant disagrees that such disclosure even if it existed, anticipates the specifically claimed feature of "a through machined main flow port located eccentrically on said inlet and said outlet ends;" as recited in claim 1 or "a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal throughbore axis parallel spaced from the central longitudinal axis " of claim 7.

It is the Applicant's position that because of the significant machining which must be undertaken to create the features of the Matousek '895 housing 10, i.e. to form the valve chamber 12 and the inlet and outlet ports 14, 16, that the integrally machined inlet port 14 and the outlet port 16 specifically define the inlet and outlet ends of the housing 10 of the applied reference. It is further the Appellant's position that the chimney-like extension of the valve

chamber 12 above the main body portion a of the housing 10 has no relevance or bearing upon what a person of ordinary skill in the art would consider to be the inlet and outlet ends of the valve housing.

Therefore, construing the applied reference in the manner as would one skilled in the art, the Appellant asserts that Matousek '895 discloses merely a central throughbore extending centrally along the axis 17 expressly defined by the inlet and outlet ports (ends) 14, 16 of the housing 10 and does not anticipate claims 1 and 7 as rejected by the Examiner. In view thereof the Appellant respectfully requests that the Board overturn the anticipation rejection and allow the present claims of the Application.

9. ARGUMENTS - Rejections Under both 35 U.S.C. § 102(b) and 103(a):

- (a) Matousek '895 does not anticipate claim 6 under 35 U.S.C. 102(b) because the cited reference does not disclose each and every feature of the present invention as required by case law.

Independent method claim 6 is also rejected, under 35 U.S.C. § 102(b), as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Matousek '895. The Applicant has made similar amendments to those in the apparatus claim 1 to the method claim 6 which now includes the specific step of, "selecting the reduced size barstock having a substantially uniform transverse cross-section defining an outer wall configuration formed about a longitudinal center line. . .".

In order to properly support an anticipation rejection under 35 U.S.C. § 102(b), the cited reference, Matousek '895, must disclose each and every limitation of the presently claimed invention. Observing Fig. 1 of Matousek '895 and the related description at column 2, lines 56-64, the Applicant notes that Matousek '895 includes a body 10 having an inlet flow passageway 14, and an outlet flow passageway 16 which extend directly through the middle of the portion of the body 10 forming the internal valve chamber 12 and the inlet and outlet ends 14, 16, respectively.

The Examiner argues that the method of making is either inherent or obvious in view of Matousek's machined valve. With respect the inherency of forming an eccentrically located bore, the Appellant has made a thorough study of Matousek '895 and can find no disclosure, teaching or even a suggestion that the Matousek's valve could be made by the step of "selecting the reduced size barstock having a substantially uniform transverse cross-section defining an outer wall configuration formed about a longitudinal center line. . ." as specifically recited in claim 6.

Again, as best the Appellant understands the Examiner's general argument relative to this feature of the Appellant's claimed invention, as apparently set forth in section 6., on page 3 of the Final Official Action of July 9 2004, the Examiner asserts that relative to an entire piece of bar stock forming the Matousek '895 valve housing 10, including the main body portion a and the valve chamber portion b, the fluid passage along axis 17 is offset relative to some undefined centerline of the entire barstock housing 10. Whether this is true or not, and the Appellant can find no disclosure in Matousek '895 to support the Examiner's contention, the Appellant disagrees that such disclosure even if it existed, anticipates the specifically claimed feature of "selecting the reduced size barstock having a substantially uniform transverse cross-section defining an outer wall configuration formed about a longitudinal center line. . ." as specifically recited in claim 6.

It is the Applicant's position that because of the significant machining which must be undertaken to create the features of the Matousek '895 housing 10, i.e. to form the valve chamber 12 and the inlet and outlet ports 14, 16, that the integrally machined inlet port 14 and the outlet port 16 specifically define the inlet and outlet ends of the housing 10 of the applied reference. It is further the Appellant's position that the chimney-like extension of the valve chamber 12 above the main body portion a of the housing 10 has no relevance or bearing upon what a person of ordinary skill in the art would consider to be the inlet and outlet ends of the valve housing.

Therefore, construing the applied reference in the manner as would one skilled in the art, the Appellant asserts that Matousek '895 discloses merely a central throughbore extending centrally along the axis 17 expressly defined by the inlet and outlet ports (ends) 14, 16 of the housing 10 and does not anticipate claim 6 as rejected by the Examiner.

Furthermore regarding the pragmatic issue of making a valve as in Matousek '895 the very nature of Matousek's non-uniform valve and the substantial machining necessary to form the extended chimney portion would more inherently lead one of skill in the art not to use common barstock due to the tremendous machining costs to produce such a valve.

One of the benefits of the present invention arises from the use of preselected barstock of a size which eliminates the necessity to mill the barstock as in Matousek '895. The Applicant's use of unmilled preselected barstock having a substantially constant, or uniform cross-section is particularly different than the milled valve features of Matousek '895. Claim 6 now specifically recites the step of ". .selecting the reduced size barstock having a substantially uniform transverse cross-section defining an outer wall configuration formed about a longitudinal center line and cutting the reduced barstock size to length;". The Applicant believes this amendment more clearly defines the inventive subject matter of the present invention over Matousek '895, since the milled upwardly extending chimney-like portion 82 extending from the valve walls cannot define an outer valve wall having a uniform transverse cross-section as presently claimed.

- (b) Matousek '895 does render claim 6 obvious under 35 U.S.C. 103(a) because the cited reference does not teach or suggest anything which would lead one of skill in the art to achieve the presently claimed invention.

It is alleged in the Final Official Action that the step of forming an eccentric bore is inherent and obvious. The Appellant is a manufacturer of valves and respectfully disagrees with this position. Furthermore, no evidence in any form, documentary, official notice nor affidavit has been produced to support such an allegation. The Appellant particularly believes that where a feature is stated to be extremely well known, it is not unreasonable that some

objective evidence indicating as such could be cited or produced so that the Appellant could provide suitable contradictory evidence.

"The mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency]." In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981) (citations omitted) "That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." In re Spormann, 363 F.2d 444, 448, 150 USPQ 449, 452 (CCPA 1966). "Such a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." See In re Newell, 891 F.2d 899, 901, 13 USPQ2d 1248, 1250 (Fed.Cir. 1989).

"To establish inherency, the extrinsic evidence must make clear that the missing descriptive material is necessarily present in the thing described in the reference, and that it would be recognized by persons of ordinary skill...However, inherency may not be established by probabilities or possibilities." In re Robertson, (Fed. Cir. 1999).

The Appellant has set forth reasons in both the specification, as well as responses and the previous Appeal Brief as to the non-obviousness of the present invention. As an example, on page 2 of the Appellant's specification lines, 6-9 "Wherefore, it is an object of the present invention to overcome the aforementioned problems associated with standard barstock body valves by machining the primary passage of the valve eccentrically (off-centerline) permitting use of initially smaller and lighter barstock material." In addition, the Appellant's specification expressly relates several reasons why the eccentric bore is specifically important, one example being to allow ".....the relative reduction in barstock size achievable to incorporate longer stem 41, by eccentrically boring through port 33" (page 5, lines 23-25).

In rejecting claims under 35 U.S.C. § 103(a), it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073-74, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary

skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 766 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Just as in the previous office actions from which the Appellant appealed, the Examiner is basing an entire obviousness argument apparently upon a highly subjective interpretation of Matousek's figures 1-4. The Applicant has made a thorough study of Matousek '895 and can find no disclosure, teaching or suggestion which would lead one of skill in the art to make the applicant's invention as claimed. As previously discussed Matousek's valve and the intensive machining necessary to fabricate this product are exactly what the present invention is designed to overcome. Therefore, from an obvious standpoint this reference teaches directly away from the presently claimed invention, especially without any supporting factual evidence, or substantive argument relative to the obviousness rejection. "If the Examiner maintains that there is still an explicit or implicit teaching or suggestion in the prior art, he/she must indicate where such teaching or suggestion appears in the applied references." In re Yates, 663 F.2d 1054, 211 USPQ 1149, 1151 (CCPA 1981).

It is further the Appellant's position that based on this lack of evidence and argument that the Examiner is using improper hindsight in applying the obviousness rejection to the Appellant's claimed invention. ."[I]t is not enough for a valid rejection to view the prior art in retrospect once an applicant's disclosure is known. The art applied should be viewed by itself

to see if it fairly disclosed doing what an applicant has done. " In re Shaffer, 108 USPQ 326, 328, 329 (CCPA 1956).

Having read and understood the Appellant's invention and method of making the invention, the Examiner may well believe that Matousek's valve could be made using the same or similar method. However this is improper use of hindsight without some motivation provided by the cited reference, or at least some evidence from the art or even the Examiner's own experience to show that a person of skill in the art would have made Matousek's valve in such a manner absent the Applicant's specific teachings.

It is the Applicant's position therefore that the Examiner has failed to assert a prima facie case of obviousness. "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed.Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed.Cir. 1988).

10. ARGUMENTS - Rejections Under 35 U.S.C. § 103(a):

(a) It is the Appellant's belief that the obviousness rejection of claim 8 under 35 U.S.C. § 103(a) based on Matousek 'in view of Dicky '055 is in error for the following reasons.

In rejecting claims under 35 U.S.C. § 103(a), it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073-74, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one

having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 766 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)

Even if a combination of Matousek 'in view of Dicky '055 is proper, and such is adamantly not conceded in light of the substantial difference in the valve housing design necessary to accommodate the preloaded packing arrangement of Matousek '985, the combination still does not show, teach or disclose, either expressly or inherently, the features of the presently claimed invention, most notably as recited in claim 8, "a barstock body having outer walls extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-section circumscribed about a central longitudinal axis;" A combination of the two references would merely show the addition of a third outlet to the Matousek '895 valve housing. However, noting the other features of the presently claimed invention, the mere addition of a third outlet still fails to disclose, teach or suggest the specifically claimed structural features as recited in claim 8 regarding the placement of the third port in the thicker outer wall portion of the valve.

Again assuming that the references are combinable, and such is adamantly not conceded hereby, it is important to understand what such a combination allegedly teaches. Neither Dicky '055 nor Matousek '895 teach placement of the valve stem in a thinner portion of the valve wall. Dicky discloses only a constant thickness wall of the entire T-valve body 16. This is distinctly opposite of the Appellant's invention as recited in claim 8 and as shown in Appellant's Fig. 1a where the barstock body is minimized adjacent the stem and the third or bottom flow port is machined in the thicker portion of the wall.

Furthermore, the Appellant believes that there is not only no teaching, suggestion or disclosure to accomplish the invention as set forth in claim 8, but that if applicable at all, Matousek '895 actually teaches placing the valve stem in the thicker portion of the valve as specifically argued by the Examiner. Therefore, in the case of claim 8 Matousek '895 teaches specifically away from the feature of claim 8 namely "a machined bottom flow port formed perpendicular to said through bore through the thicker outer wall portion;...."

In view of the foregoing arguments, it is respectfully submitted that this application is not obvious in view of Matousek '895 in view of Dicky '055 and the Examiner's raised 35 U.S.C. § 103 rejection based on the same should therefore be overturned at this time. Accordingly, reversal of the final rejection of claim 8 is respectfully requested in view of the foregoing and issuance of a Notice of Allowance is now believed in order.

#### 11. ARGUMENTS - Objections under 35 U.S.C. § 112, first paragraph

The Appellant's claim language and interpretation is fully supported by the claims and specification.

The Examiner alleges that the Appellant's claim language of "...substantially uniform cross-section..." describing the novel barstock valve "...is not supported by the claims or the specification. Interpreting the language as the Applicant does is very close to new matter." Although the Examiner has not made a rejection under 35 U.S.C. 112 1<sup>st</sup> paragraph, in order to be fully responsive to the allegations of new matter, the Appellant will appropriately respond assuming an inadequate written description was in fact made out by the Examiner.

Primarily the Applicant notes that the Appellant's specification expressly recites "...a preselected cross-section defining the outer walls;... " at page 1, line 27-28. Although the specific word "uniform" is not used herein, it is readily apparent from observing Appellant's figs. 1-8 that the preselected cross-section defining the outer walls is uniform, or substantially uniform along the transverse length of the valve. In addition, it is well known that steel bar stock is manufactured and supplied in a variety of lengths and cross sections. These cross-sections

are necessarily uniform along the length of any piece of barstock. To be anything but uniform would vitiate the rational for using such bar stock to produce inexpensive and easily manufactured valves. A valve manufacturer will for example have on hand at a given point in time an inventory of different sizes and cross sections of such bar stock. However, it is well known that each piece of bar stock is itself formed having a uniform cross section.

More importantly, the "...uniform cross section..." as recited is specifically shown in each of the Appellants Figs. 1-8. Although the cross section at any given point along the length of the valve may include a passage or hole, for example the through bore for the fluid and the perpendicular ball stem passage, the size and relative outer dimensions of the valve body cross-section are consistent. This is readily apparent in viewing each the Appellant's figures included in the original application.

In view of the foregoing, it is the Appellant's belief that the entered amendments to claims 1, 6, 7 and 8 are not new matter and that the meaning the Appellant is trying to instill in the terms is supported specifically not only the specification but also at least by Figs. 1, 1a, 2 and 5-8. Furthermore, such uniformity of original barstock is well known and understood in the art. It is alleged in the final official action that "[t]he meaning that the Applicant is trying to instill on the terms is not supported by the claims in the specification. Interpreting that language as the Applicant argues is very close to new matter." The Appellant has entered the specific language of substantially uniform transverse cross-section in place of preselected to clarify the present invention in view of the prior art. The "substantially uniform transverse cross-section" is believed specifically shown by Figs. 1, 1a, 2, 5-8 and particularly in the cross-sectional Figs. 2, 5-8 which show a uniform cross-section along the entire length of the valve as seen in the planar sideviews of Figs. 1 and 1a.<sup>1</sup>

The "meaning" that the Appellant is expressing is merely that the cross-section of the outer walls of the barstock is constant substantially across the length of the valve. This is

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<sup>1</sup>The Appellant is amendable to eliminating the word "substantially" so that the claim language recites "...a uniform cross-section..."

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particularly different than Matousek '895 which has a substantially variable cross section defining a stepped outer wall of significantly different diameters.

The Applicant thus believes there is complete support in the specification as shown in the Figures for such an amendment and furthermore, such an amendment defines the present invention over the Matousek '895 reference which does not show a cross-sectional profile of substantially uniform cross-section along its length as seen in Figs. 1 and 2. Matousek '895, in fact, is exactly the type of machine ball valve which the present invention is designed to efficiently replace where a valve handle support, such as shown in Matousek '895, and can be clearly seen in Fig. 4 extending upwards from the body 10 of the valve. This type of handle support takes tremendous amounts of machining time that a valve from preselected barstock having a constant uniform cross-section does not need to have formed in it.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service, with sufficient postage, as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on September 29, 2004.

By: 

Print Name: Scott A. Daniels

APPENDIX A

PENDING CLAIMS 1-3 and 5-8

1. A barstock body fluid control valve comprising:

a barstock body of preselected material having an inlet end and an outlet end, and a substantially uniform transverse cross-section defining the outer walls;

a through machined main flow port located eccentrically on said inlet and said outlet ends;

wherein said main flow port eccentric location increases the available barstock thickness at one outer wall location and decreases barstock thickness in the opposite wall.

2. The valve according to claim 1 further comprising a machined stem port perpendicular to said flow port positioned at said increased barstock thickness.

3. The valve according to claim 1 further comprising a machined bottom flow port perpendicular to said flow port; a machined stem port centrally aligned with said bottom flow port, said stem port machined through the opposite outer wall of said barstock body; wherein barstock cross section is minimized adjacent to the stem port.

5. The valve according to claim 1 in the form of a quarter turn ball valve.

6. A method of forming a barstock body fluid control valve using reduced barstock size and a standard size valve stem, the method comprising the steps of:

selecting the reduced size barstock having a substantially uniform transverse cross-section defining an outer wall configuration formed about a longitudinal center line and cutting the reduced barstock size to length;

forming a valve body by machining flat surfaced ends on said reduced barstock size perpendicular to said barstock outer wall;

defining a throughbore axis offset from and parallel to the longitudinal centerline of the barstock;

machining a throughbore in said barstock symmetrically about the offset throughbore axis to produce an eccentrically located throughbore defining a thicker portion and a thinner portion of said barstock outer wall;

machining a valve stem bore perpendicular to said throughbore in the thicker portion of the barstock outer wall located a maximum distance from said offset throughbore axis;

selecting a standard size valve stem to be inserted in the valve stem bore in the thicker portion of the barstock outer wall resulting in the thinner portion of the barstock wall positioned opposite the valve stem; and

installing the standard size valve stem in said valve stem bore.

7. A two port fluid control valve comprising:

a barstock body having outer walls extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-section circumscribed about a central longitudinal axis;

a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal throughbore axis parallel spaced from the central longitudinal axis,

the through bore is eccentrically located with respect to the outer walls producing a thicker outer wall portion and a relatively thinner opposite wall portion of the barstock body; and

wherein a stem port communicates perpendicularly with said throughbore machined through said thicker outer wall portion of the barstock body.

8. A three port fluid control valve comprising:

a barstock body having outer walls extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-section circumscribed about a central longitudinal axis;

a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal through bore axis parallel spaced from the central longitudinal axis,

the through bore is eccentrically located with respect to the outer walls producing a thicker outer wall portion and a relatively thinner opposite wall portion of the barstock body;

a machined bottom flow port formed perpendicular to said through bore through the thicker outer wall portion; and

a machined stem port communicates perpendicularly with said throughbore and axially aligned with said bottom flow port, said stem port machined through the thinner opposite wall portion of said barstock body.

Practitioner's Docket No. GEMVAL P15AUS**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Roger MASSEY

Application No.: 09/585,222

Group No.: 3732

Filed: June 1, 2000

Examiner: D. Austin Bonderer

For: BAR-STOCK BALL VALVE

**Mail Stop Appeal Brief—Patents**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

**TRANSMITTAL OF APPEAL BRIEF  
(PATENT APPLICATION—37 C.F.R. § 1.192)**

**NOTE:** *The phrase "the date on which" an "appeal was taken" in 35 U.S.C. 154(b)(1)(A)(ii) (which provides an adjustment of patent term if there is a delay on the part of the Office to respond within 4 months after an "appeal was taken") means the date on which an appeal brief under § 1.192 (and not a notice of appeal) was filed. Compliance with § 1.192 requires that: 1. the appeal brief fee (§ 1.17(c)) be paid (§ 1.192(a)); and 2. the appeal brief complies with § 1.192(c)(1) through (c)(9). See Notice of September 18, 2000, 65 Fed. Reg. 56366, 56385-56387 (Comment 38).*

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on July 29, 2004.

**NOTE:** *"Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such time is later, file a brief in triplicate. . ." 37 C.F.R. § 1.192(a) (emphasis added).*

**CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\***

*(When using Express Mail, the Express Mail label number is mandatory;  
Express Mail certification is optional.)*

I hereby certify that, on the date shown below, this correspondence is being:

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deposited with the United States Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

**37 C.F.R. § 1.8(a)****37 C.F.R. § 1.10 \***

with sufficient postage as first class mail.

as "Express Mail Post Office to Addressee"

Mailing Label No. \_\_\_\_\_ (mandatory)

**TRANSMISSION**

facsimile transmitted to the Patent and Trademark Office, (703) \_\_\_\_\_

Signature

Scott A. Daniels

*(type or print name of person certifying)*

Date: September 29, 2004

\* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

## 2. STATUS OF APPLICANT

This application is on behalf of

- other than a small entity.  
 a small entity.

A statement:

- is attached.  
 was already filed.

## 3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. § 1.17(c), the fee for filing the Appeal Brief is:

<input checked="" type="checkbox"/> small entity	\$165.00
<input type="checkbox"/> other than a small entity	\$330.00

**Appeal Brief fee due \$ 165.00**

## 4. EXTENSION OF TERM

*NOTE: 37 C.F.R. § 1.704(b) ". . .an applicant shall be deemed to have failed to engage in reasonable efforts to conclude processing or examination of an application for the cumulative total of any periods of time in excess of three months that are taken to reply to any notice or action by the Office making any rejection, objection, argument, or other request, measuring such three-month period from the date the notice or action was mailed or given to the applicant, in which case the period of adjustment set forth in § 1.703 shall be reduced by the number of days, if any, beginning on the day after the date that is three months after the date of mailing or transmission of the Office communication notifying the applicant of the rejection, objection, argument, or other request and ending on the date the reply was filed. The period, or shortened statutory period, for reply that is set in the Office action or notice has no effect on the three-month period set forth in this paragraph."*

*NOTE: The time periods set forth in 37 C.F.R. § 1.192(a) are subject to the provision of § 1.136 for patent applications. 37 C.F.R. § 1.191(d). See also Notice of November 5, 1985 (1060 O.G. 27).*

*NOTE: As the two-month period set in § 1.192(a) for filing an appeal brief is not subject to the six-month maximum period specified in 35 U.S.C. § 133, the period for filing an appeal brief may be extended up to seven months. 62 Fed. Reg. 53,131, at 53,156; 1203 O.G. 63, at 84 (Oct. 10, 1997).*

The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

(complete (a) or (b), as applicable)

- (a)  Applicant petitions for an extension of time under 37 C.F.R. § 1.136  
(fees: 37 C.F.R. § 1.17(a)(1)-(5)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 420.00	\$ 210.00
<input type="checkbox"/> three months	\$ 950.00	\$ 475.00
<input type="checkbox"/> four months	\$ 1,480.00	\$ 740.00
<input type="checkbox"/> five months	\$ 2,010.00	\$ 1,005.00

Fee: \$ \_\_\_\_\_

(Transmittal of Appeal Brief [9-6.1]—page 2 of 4)

If an additional extension of time is required, please consider this a petition therefor.

*(check and complete the next item, if applicable)*

- An extension for \_\_\_\_\_ months has already been secured, and the fee paid therefor of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ \_\_\_\_\_

or

- (b)  Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

#### 5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee \$ 165.00

Extension fee (if any) \$ \_\_\_\_\_

**TOTAL FEE DUE \$ 165.00**

#### 6. FEE PAYMENT

- Attached is a  check  money order in the amount of \$ 165.00
- Authorization is hereby made to charge the amount of \$ \_\_\_\_\_  
 to Deposit Account No. 040213
- to Credit card as shown on the attached credit card information authorization form PTO-2038.

**WARNING:** Credit card information should not be included on this form as it may become public.

- Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

#### 7. FEE DEFICIENCY

**NOTE:** If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to change the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, 1065 O.G. 31-33.

- If any additional extension and/or fee is required,

AND/OR

- If any additional fee for claims is required, charge:  
 Deposit Account No. 040213
- Credit card as shown on the attached credit card information authorization form PTO-2038.

**WARNING:** Credit card information should not be included on this form as it may become public.

Date: September 29, 2004

Reg. No.: 42,462

Customer No.: 020210



**SIGNATURE OF PRACTITIONER**

Scott A. Daniels  
*(type or print name of practitioner)*

500 N. Commercial Street

P.O. Address

Manchester, NH 03101

(Transmittal of Appeal Brief [9-6.1]—page 4 of 4)